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10/664,660	09/19/2003	Seok-Pil Lee	20063/10002	4611

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EXAMINER

NALEVANKO, CHRISTOPHER R

ART UNIT PAPER NUMBER

2611

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/664,660

Applicant(s)

LEE ET AL.

Examiner

Christopher R. Nalevanko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Response to Arguments**

1. Applicant's arguments, with respect to foreign priority have been fully considered and are persuasive. Foreign priority is acknowledged.
2. Applicant's arguments filed 06/13/2005 have been fully considered but they are not persuasive.

Regarding Claim 1, Applicant argues that "neither Picco nor Krasnow discloses displaying a television program comprising second metadata much less matching the second metadata with the first metadata and displaying the advertisement in a banner form in response to the matching. As a result, any combination of Picco and Krasnow necessarily fails to disclose displaying a television program comprising metadata and further fails to disclose matching the second metadata with the first metadata and displaying the advertisement in a banner in response to the matching. . . Picco does not disclose displaying a television program comprising second metadata much less matching the second metadata of the displayed television program with the first metadata and displaying the advertisement in a banner form in response to the matching. . . As such, the control signals determine at which time and what local content will be displayed on a user's set top box prior to such local content being transmitted to the user's set top box. . . Unlike television programs comprising second metadata any local content Picco displays is not responsive to a television program being viewed by a user" (pages 6-7 lines 6-11, 19-30, 3-4). Examiner asserts that Picco clearly shows that there is secondary metadata, identifying data, and control data that clearly defines the transmitted program (col. 6 lines

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35-42, local contents space identified, col. 8 lines 15-21, control data in local content space identifying broadcasted program, lines 59-67, PSI, PAT, PMT, program specific information that identifies the program, col. 9 lines 60-67, col. 10 lines 1-20, control data streamed in real time with programming streams to determine where local content should be inserted in particular spot in programming stream). Picco clearly shows that programming data is sent to the user with control data and program specific data identifying aspects of the program. Furthermore, the secondary data identifies appropriate slots to insert certain local programming. Also, there is nothing in the claimed limitations that requires temporal restrictions to be read in, and the argument is moot. Even so, Picco clearly shows that the control data for the programs can be received in real time along with the program stream (col. 9 lines 60-67, col. 10 lines 1-20, control data streamed in real time with programming streams to determine where local content should be inserted in particular spot in programming stream). The claimed limitations are met.

Applicant further argues that “even if Picco describes a television program comprising second metadata, an assumption with which the applicants do not agree, rather than matching the second metadata with the first metadata and displaying the advertisement in response to the matching, Picco assembles local content prior to, and independent of a television program viewed by the user. . . . As such, Picco necessarily fails any teaching of matching the second metadata with the first metadata, and displaying the advertisement in a banner form in response to the matching” (page 7 lines 9-23). Picco clearly shows that the advertisement content contains data that describes it (col. 6 lines 60-67, each piece of local content contains content profile and identification

code). Picco also shows that the programming has identification information related to it that describes the content (col. 8 lines 55-67, program specific information, command signal, col. 9 lines 64-67, command signals downloaded in real time with programming feed, col. 10 lines 1-20, content profile used to specify contents). Subsequently, these two pieces of data are used, or compared, to identify the correct time to insert the local advertisement (col. 9 lines 60-67, col. 10 lines 1-20, control data streamed in real time with programming streams to determine where local content should be inserted in particular spot in programming stream, col. 6 lines 35-42, local contents space identified). Because the correct insertion spot must be identified, there is a necessary comparing function that must occur in order to associate the two pieces of data together.

Applicant further argues that “Picco fails to disclose a method of displaying an advertisement using metadata comprising analyzing and filtering first metadata associated with an advertisement based on the user's preference and storing the advertisement selectively corresponding to the user's preference on the local storage...” (page 8 lines 1-4). Picco clearly shows that advertisement data is received that contains first meta-data (col. 6 lines 60-67, each piece of local content contains content profile and identification code). Based on this first meta-data and user preferences, the system selectively stores the advertisement data in local storage (col. 13 lines 40-55, col. 14 lines 1-17, locally storing only advertisement content that fits the user preferences). This selective storage based on user preferences is analyzing and filtering.

Regarding Claim 7, the arguments with regards to Picco have been discussed above.

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3. Applicant's arguments pertaining the Foreign Priority with respect to the rejection(s) of using the Ma reference have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Calvert US Patent Application Publication No. 2004/0078812.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al (6,029,045) in further view of Krasnow et al (2003/0226141).

Regarding Claim 1, Picco shows a method of displaying an advertisement using metadata comprising, constructing a user's preference for television programs and storing the user preferences on a local storage device (col. 10 lines 55-64, set-top box accumulating viewer preference data as well as user profile data), analyzing and filtering first metadata (col. 6 lines 56-67, various attributes of advertisement that are used to select appropriate ad for viewing), or associated data, associated with an advertisement based on the user's preference (col. 13 lines 40-54, using content profile data to see if data matches profile) and storing the advertisement selectively corresponding to the

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user's preference on the local storage (col. 13 lines 40-54, storing advertisement data on disk), display a television program (col. 14 lines 10-16, programming data stream), the program comprising second metadata (col. 6 lines 35-42, local contents space identified, col. 8 lines 15-21, control data in local content space identifying broadcasted program, lines 59-67, PSI, PAT, PMT, program specific information that identifies the program, col. 9 lines 60-67, col. 10 lines 1-20, control data streamed in real time with programming streams to determine where local content should be inserted in particular spot in programming stream), interpreting second associated data with program and matching the second data of the program with first data associated with the advertisement (col. 14 lines 1-16, determining what local content to display for an ad space based on particular space and profile data, col. 9 lines 60-67, col. 10 lines 1-20, control data streamed in real time with programming streams to determine where local content should be inserted in particular spot in programming stream, col. 6 lines 35-42, local contents space identified), and displaying the advertisement (col. 14 lines 1-16, inserting advertisement in programming stream). Although Picco shows displaying an advertisement, Picco fails to specifically show displaying the advertisement in a banner. Krasnow shows displaying advertisements in a banner (page 1 section 0014, page 4 section 0047, page 7 section 0072). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Picco to show advertisements in a banner, as shown by Krasnow, so that the user could continue to watch a program while advertisements were being displayed.

Regarding Claim 2, Picco shows user preferences that can indicate local content by zip code or area, which denotes what local broadcasting to receive for a broadcaster (col. 7 lines 55-67, col. 8 lines 1-6, distribution variable).

Regarding Claim 3, Picco shows that the associated advertisement data is provided by a third party, or broadcaster (col. 6 lines 57-67, uplink facility including database that stores content profile). Picco also shows that data may be provided over the Internet (col. 14 lines 60-67).

5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al (6,029,045) in further view of Krasnow et al (2003/0226141) and Calvert (2004/0078812).

Regarding Claim 4, Picco shows interpreting the first data associated with advertisement based on the user's preferences and Krasnow shows using XML, but neither specifically state an XML parser. Calvert shows using an XML parser (page 4 section 0038, XML parser). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco and Krasnow with the ability to use an XML parser, as shown in Calvert, so that the set-top box could efficiently strip the metadata for use by the processor. Furthermore, XML is a commonly used programming language and using the related processing components would allow for integration with existing systems and software.

Regarding Claim 5, Calvert further shows using a DOM (page 3 section 0031-0032).

Regarding Claim 6, Calvert shows using an API (page 2 section 0025).



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6. Claims 7-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al (6,029,045) in further view of Calvert (2004/0078812).

Regarding Claim 7, Picco shows an apparatus for selectively displaying an advertisement using metadata comprising a display a television program (col. 14 lines 10-16, programming data stream), a storage for the user preferences on a local storage device (col. 10 lines 55-64, set-top box accumulating viewer preference data as well as user profile data) and storing the advertisement including first metadata (col. 6 lines 60-67, each piece of local content contains content profile and identification code) selectively corresponding to the user's preference on the local storage (col. 13 lines 40-54, storing advertisement data on disk), and a matching engine for selecting the advertisement as a result of matching the first metadata with the second metadata (col. 6 lines 56-67, various attributes of advertisement that are used to select appropriate ad for viewing, col. 9 lines 60-67, col. 10 lines 1-20, control data streamed in real time with programming streams to determine where local content should be inserted in particular spot in programming stream, col. 6 lines 35-42, local contents space identified) and associated with an advertisement based on the user's preference (col. 13 lines 40-54, using content profile data to see if data matches profile). Picco fails to specifically state an XML parser. Calvert shows using an XML parser (page 4 section 0038, XML parser). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco with the ability to use an XML parser, as shown in Ma, so that the set-top box could efficiently strip the metadata for use by the processor. Furthermore, XML is a

commonly used programming language and using the related processing components would allow for integration with existing systems and software.

Regarding Claim 8, the combination of Picco and Calvert discloses the claimed limitations, wherein Picco shows an interpreter for interpreting the metadata associated with the television program (col. 14 lines 1-16, determining what local content to display for an ad space based on particular space and profile data) and Calvert teaches a XML parser (page 4 section 0038, XML parser).

Regarding Claim 11, Picco and Calvert fail to show recording a television show in the local storage. Official Notice is given that it is well known and expected in the art to store programming material in local storage. This allows users to conveniently play back interesting parts of video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Picco and Calvert with the ability to store programming locally so that the user could conveniently access previously played video.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al (6,029,045) in further view of Calvert (2004/0078812) and Krasnow et al (2003/0226141).

Regarding Claim 10, Picco and Calvert fail to show using a banner ad. Krasnow shows displaying advertisements in a banner (page 1 section 0014, page 4 section 0047, page 7 section 0072). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Picco and Calvert to show

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advertisements in a banner, as shown by Krasnow, so that the user could continue to watch a program while advertisements were being displayed.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Nalevanko whose telephone number is 571-272-7299. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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